

### Low Carbon Transit Operations Program (LCTOP) PROJECT DESCRIPTION AND ALLOCATION REQUEST (SUMMARY)

**Project Information:** 

Lead Agency:	San Diego Association of Governments
Project Name:	South Bay Rapid
Project Type: <u>See</u> Attachment A	B1: Install new stops/stations for local bus, intercity rail, commuter bus or rail service
Description of Project (Short):	The South Bay Rapid Project will construct shelters at six stations, including five new Bus Rapid Transit (BRT) stations, along a new 21 mile BRT route that will operate between Downtown San Diego and the Otay Mesa International Border Crossing via eastern Chula Vista. The shelters are highly amenitized with increased lighting, stone cladding, and large roofs to cast a large shadow. The construction of these shelters will supplement other components of this new route, including a dedicated BRT guide way, exclusive transit, pedestrian bridges, and a new intermodal transportation center at the border. Once completed, the South Bay Rapid will increase ridership and integration with rail services by enabling transfers to several trolley lines, as well to the COASTER commuter rail service, and will provide direct connections to the Amtrak station in Downtown San Diego, with the potential to extend service to the southern terminus station for future High Speed Rail service.
Project Location:	City of San Diego, City of Chula Vista, County of San Diego
Project Start Date (anticipated):	27-Mar-16
Project End Date (anticipated):	31-Jul-17

**Funding Information:** 

runding intormation;		
Funding Year:	2015/2016	
Requested Amount of PUC 99313:	\$375,669	
Requested Amount of PUC 99314:	\$0	
Total LCTOP Funding:	\$375,669	
Total Project Cost:	97,137,000	

### **Project Benefits:**

Greenhouse Gas Benefits (off of worksheet)

Greeniouse Gas Denemis (off of worksheet)				
Estimated GHG Reduction:	6750.31			
Project Life:	20			
Estimated Total GHG Reduction:	6750.31			

Statement Contracts

Disadvantaged Communities (DAC) Benefits:			
Does your service area have a DAC?	Yes		
Does the Project Benefit a DAC?	Yes		
Identify the DAC Census Tracts?	Census Tract: 6073013205		
Identify Specific DAC Benefit Criteria? See Attachment B	TP 2C: Project provides improved intercity rail (and related feeder bus service), commuter bus or rail transit service for riders using stations or stops in a ZIP code that contains a disadvantaged community census tract or within ½ mile of a disadvantaged community.		
Qualitative Description of DAC Benefit?	The South Bay Rapid will provide benefits to disadvantaged communities in San Diego by providing a transit alternative for residents and employees in the corridor who currently have no viable transit options. In particular, pursuant to California Air Resources Board Guidance regarding transit projects, this Project will provide improved transit service for riders using stations or stops in zip codes that contain disadvantaged community census tracts (census tract: 6073013205, zip codes: 92154 and 91911) and increased transit connectivity between stations and stops, thereby providing convenient access to employment areas, shopping centers, and higher education providers.  Completion of the South Bay Rapid also will provide greater mobility and increased access to clean transportation for disadvantaged community residents and help to increase transit ridership from designated disadvantaged communities in Downtown San Diego by providing service to key employment areas in Eastern Chula Vista and Otay Mesa.		
Describe the DAC Need Project Addresses?	Construction of the South Bay BRT Project will provide a viable transit option for an important geographic route where transit service currently does not exist. The introduction of this route will provide unprecedented opportunity for those living, working, and traveling through the eastern Chula Vista/Otay Mesa area to use transit and thereby increase access to key employment, education, and service destinations in the region.		
Total GGRF \$ Allocated to DAC Benefits?	\$11,375,669		
	Co-benefit		
Critical Air Pollution Reduction:	N/A		
VMT Reduction:	816628.08		
Ridership Increase	2731200		
Fuel Ues Reduction:	N/A		
Energy Use Reduction:	N/A		

**Project Lead:** 

Date:



### Low Carbon Transit Operations Program (LCTOP) PROJECT DESCRIPTION AND ALLOCATION REQUEST (ALLOCATION)

	Regional Entity:	
Project Lead: San Diego Association of Governments		County: San Diego
Project Title: South Bay Rapid		

the scope, cost, schedule, and benefits as identified in the attached Allocation Request (Request) and

I certify

attachments are true and accurate and demonstrate a fully funded operable project. I understand the Request is subject to any additional restrictions, limitations or conditions that may be enacted by the State Legislature, including the State's budgetary process and/or auction receipts. In the event the project cannot be completed as originally scoped, scheduled and estimated, or the project is terminated prior to completion, project lead shall, at its own expense, ensure that the project is in a safe and operable condition for the public. I understand this project will be monitored by the California Department of Transportation - Division of Rail and Mass Transportation. Kim Kawada Name: Signature: Title: Chief Deputy Executive Director San Diego Association of Governments Agency: Date: 2/9/2016 Amount: \$375,669 **Contributing Sponsor(s):** \*If this project includes funding from more than one project sponsor, the project lead above becomes the "recipient agency" and the additional contributing project sponsor(s) must also sign and state the amount and type of LCTOP funds (PUC Sections 99313 and 99314) contribution. Sign below or attach a separate officially signed letter providing that information. If there is more than one contributing sponsor, please submit additional page, or a letter from the additional contributors. Name: N/A Signature: Title: Agency:

Amount:



### Low Carbon Transit Operations Program (LCTOP) PROJECT DESCRIPTION AND ALLOCATION REQUEST (FUNDING)

15/16

\$375,669

\$0

\$0

LCTOP Allocation

Request Amount per PUC 99313:

Request Amount per PUC 99	9314:	60	\$0	\$0
Total Project Allocation Req	uest: \$375,60	59	\$0	\$0
Project 7	Fitle: South Bay R	apid		
Project Location/Add	ress: City of San D	iego, City	y of Chula Vista, C	ounty of San Diego
Table 1: Pro	ject Lead Infori			
		L	egislative Dist	rict Numbers
Agency Name: San Diego Association of Govern	ments	A	Assembly:	78, 79, 80
Contact Person: Jennifer Williams	on		Senate:	39, 40
Contact Phone #: (619) 699-1959		Cong	ressional:	51, 53
Email Address: <u>iennifer.williamson@sandag.org</u>		Amo	unt:	PUC Funds Type:
Address: 401 B Street, Suite 800		\$	375,669	99313
San Diego, CA 92101		\$		
Table 2: Contrib	uting Sponsor I			
Name: N/A		Amo	unt:	PUC Fund Type:
Contact:		\$		
Contact Phone #:				
Email Address:				
Address:				
Other Contributing Sponsors: (Attach sheet with conta	ct information)	Amo	unt	PUC Fund Type:
	•			•
N.		•		
Name				
Name:		\$	14/45-	
	TOTA	L \$375	,669	_

(\*Contributing project sponsors provide signed letters of verification as to amount and eligibility or sign cover page)



### Low Carbon Transit Operations Program (LCTOP) PROJECT DESCRIPTION AND ALLOCATION REQUEST (PROJECT)

### Table 3: Type of Project

See Attachment A for category of project (example: Category 1A Implement new or expanded transit service (for new routes or expansion of existing routes).

	<u>Operation</u>	ons Projects			Capital Pro	jects	
	A1		Ai	X	B1		Bi
	A2		Aii	X	B2		Bii
	A3		Aiii		В3		Bii
	A4		Aiv		B4		
Į	A5						

### **Table 4: Project Summary**

a) Project Description - Describe the project in your own words, using comprehensive overall project description regarding improvements to be made, increased level of service and performance goals.

The South Bay Rapid Project will construct shelters at six stations, including five new Bus Rapid Transit (BRT) stations, along a new 21 mile BRT route that will operate between Downtown San Diego and the Otay Mesa International Border Crossing via eastern Chula Vista. The shelters are highly amenitized with increased lighting, stone cladding, and large roofs to cast a large shadow. The construction of these shelters will supplement other components of this new route, including a dedicated BRT guide way, exclusive transit, pedestrian bridges, and a new intermodal transportation center at the border. Once completed, the South Bay Rapid will increase ridership and integration with rail services by enabling transfers to several trolley lines, as well to the COASTER commuter rail service, and will provide direct connections to the Amtrak station in Downtown San Diego, with the potential to extend service to the southern terminus station for future High-Speed Rail service. The primary objectives of this route are to:

Provide transit service to address the travel demand and capacity imbalance in the transportation corridor between the Otay
Mesa POE and Downtown San Diego as defined in the 2050 Regional Transportation Plan: Our Region. Our Future. and its
Sustainable Communities Strategy (2050 RTP/SCS), and the final Otay Mesa-Mesa de Otay Binational Corridor Strategic
Plan. Serve unmet travel demand by providing planned high-speed transit service between population and employment
centers in Downtown San Diego, eastern Chula Vista and the Otay Mesa POE in accordance with the 2050 RTP/SCS, and the
City of Chula Vista General Plan update.   Provide a high-speed, direct, reliable, pedestrian accessible, and convenient
transit service to connect residential areas with employment and major activity centers utilizing the Bus Rapid Transit
guideway network in eastern Chula Vista and transit infrastructure at the Otay Mesa POE and in Downtown San Diego.
Provide a transit system consistent with adopted local and regional plans and policies and related environmental documents
and support smart growth principles by incorporating existing and planned transit oriented development within the proposed
South Bay Rapid
Corridor.



b) **Project Location** - Describe the location of the project. Also provide an 8 1/2" X 11" project site map that shows the transit service area and project location. Use link to CalEPA website for information, <a href="http://www.calepa.ca.gov/EnvJustice/GHGInvest/default.htm">http://www.calepa.ca.gov/EnvJustice/GHGInvest/default.htm</a>.

The Project Area for this proposal is a 11-mile long segment of the South Bay Rapid route, operating between Eastern Chula Vista and the Otay Mesa International Border Crossing, that ultimately connects to Downtown San Diego.

The Project route will originate at a new Intermodal Transportation Center located at the Otay Mesa Border Crossing, continue north via a dedicated Bus Rapid Transit (BRT) guideway to Siempre Viva Road, and then east on Siempre Viva to State Route (SR) 905. The BRT will use SR 905 to access SR 125 to Birch Road in Eastern Chula Vista, exit at Birch Road, and travel north onto the guideway at the Otay Ranch Town Center via a restriped transit-only, left-turn lane. From there, the route will cross over SR 125 via a transit only bridge. The bridge will include a pedestrian pathway connecting the commercial center to the residential village. From the bridge, the BRT will continue using a dedicated guideway through an existing transit easement and then transition into a dedicated guideway located in the East Palomar Street median at Magdelena. The Project Area will then end once the BRT enters the Interstate 805 express lanes (already completed).

This Project Area includes residential, employment, recreation, and shopping areas. The new Otay Mesa BRT station will enable transfer connections to local and express routes serving the Otay Mesa regional employment center, as well as transit services to Downtown San Diego where riders can make convenient transfer connections to Amtrak, three light rail lines, commuter rail, four other BRT lines, and 16 local bus services. Additionally, the station in Otay Mesa will provide direct transit connections to the international border crossing and the planned BRT line being implemented in and by the City of Tijuana.

Stop Latitude Longitude
OTAY MESA INTERMODAL TRANSIT CTR 32.552925 -116.937397
HERITAGE 32.62377 -116.997098
LOMAS VERDES 32.631795 -116.983939
SANTA VENETIA 32.626683 -116.974757
PALOMAR 32.61498 -117.036483
OTAY RANCH TOWN CTR 32.624727 -116.964203

c) Project Life - For capital projects, state the Useful Life of the Project. For operations project state the number of months service will operate.

Capital:

20

Operations:

N/A



### Low Carbon Transit Operations Program (LCTOP) PROJECT DESCRIPTION AND ALLOCATION REQUEST (BENEFITS/OUTCOMES)

### Table 5: Description of Major Benefits/Outcomes

a) Greenhouse Gas Reduction - Describe how this project will reduce greenhouse gases and any assumptions or data that support this description. For example, "The expanded transit service will reduce VMT and greenhouse gas emissions by replacing auto trips with transit trips. Initial estimates indicate that the expansion could add 50 commuter bus riders per day to replace an average auto trip of 10 miles each way." If available, please provide the expected amount of VMT reductions and greenhouse gas reductions.

The expanded transit service will reduce VMT and greenhouse gas emissions by replacing auto trips with transit trips. Initial estimates indicate that the new service could reach 18,736 riders in its first year, displacing an average of about 127,598 vehicle miles travelled per year.

b) Increased Mode Share - Describe how this project will directly increase mode share.

The Project will provide transit service to address the travel demand and capacity imbalance in the corridor between the Otay Mesa International Border Crossing and Downtown San Diego. There currently is no regional transit service available within the project area, resulting in increased travel times, greenhouse gas (GHG) emissions, and increased transportation costs. South Bay Rapid will provide access for a broad range of users, including seniors, students, and disadvantaged community residents, to regional job centers, educational opportunities, and major shopping destinations. Additionally, travel times for autos within this corridor have been impacted by LOS F on the freeway corridor during peak hours and lack of mobility options. South Bay Rapid will bypass this congestion and provide a new option for passengers traveling between South County and Downtown San Diego.

### c) Disadvantaged Communities (DAC) Project Criteria

See Attachment B for DAC Criteria to Evaluate Projects (example: Category 1B Project provides transit incentives to residents with a physical address in a disadvatage community (e.g., vouchers, reduced fares, transit passes).

 Low Carbon	Tranpor	rtation Projects			Trai	nsit Projects	
1A		2A		1A		1G	2E
1B		2B		1B		1H	2F
1C		2C		1C		2A	2G
1D				1D		2B	2H
				1E	X	2C	<b>2I</b>
				1F	X	2D	

d) Disadvantaged Communities (DAC) (if applicable\*) - Describe how this project will directly benefit the DAC(s) within your service area in your own words. For agencies whose service area includes disadvantaged communities, at least 50 percent of the total moneys received shall be expended on projects that will benefit disadvantaged communities.

The South Bay Rapid Project will provide benefits to disadvantaged communities in San Diego by providing a transit alternative for residents and employees in the corridor who currently have no viable transit options. In particular, pursuant to California Air Resources Board Guidance regarding transit projects (Attachment 1 of the TIRC Program Guidelines), this Project will provide improved transit service for riders using stations or stops in ZIP Codes that contain disadvantaged community census tracts (Census Tract: 6073013205, ZIP Codes: 92154 and 91911) and increased transit connectivity between stations and stops. Completion of the South Bay Rapid also will provide greater mobility and increased access to clean transportation for disadvantaged community residents, reduce transportation-related expenditures for lower-income households, and help to increase transit ridership from designated disadvantaged communities in Downtown San Diego by providing service to key destinations in eastern Chula Vista and Otay Mesa. Implementation of the South Bay Rapid will enhance career and educational opportunities for disadvantaged populations by providing transfer connections to other highspeed rail and BRT services in Downtown San Diego that provide access to regional job centers in Kearny Mesa, University Town Center, and Sorrento Mesa. Additionally, it will provide connections to San Diego State University and UC San Diego. The South Bay Rapid will construct the final portion of a 21 mile route, allowing disadvantaged community residents in Downtown San Diego to travel to areas of the County where a transit route currently does not exist. This is a direct, meaningful, and assured benefit that will help to improve both regional and binational connectivity. Ongoing outreach by SANDAG and its network of community-based organizations will help to inform disadvantaged community residents, businesses, and visitors of these expanded and improved transit services.



### Low Carbon Transit Operations Program (LCTOP) PROJECT DESCRIPTION AND ALLOCATION REQUEST (BENEFITS/OUTCOMES)

### Table 5: Description of Major Benefits/Outcomes

e) Co-E	Benefits - Check all additional Benefits/Outcomes.			
X	Improved Safety		Coordination with Educational 1	nstitutions
<u>X</u>	Improved Public Heath		College/University	Grades K-13
	Reduced Operating/Maintenance Cost	X	Promotes Active Transportation	(walking, biking)
	Increase System Reliability	X	Promotes integration with other	modes of
<u>X</u>	Other Benefits (describe below)		transportation	

f) Co-Benefits - Describe benefits indicated above in d) and any other benefits not listed.

This Project will provide much-needed, new regional transit service to western and eastern Chula Vista and Otay Mesa. The service will provide access for a broad range of users, including seniors, students, and disadvantaged community residents to regional job centers in Downtown San Diego and the International Border Crossing at Otay Mesa. Due to the overwhelming success of Rapid services currently in operation elsewhere in the region, anticipated ridership for this Project is modeled in 2020 at 18,000 daily riders and by 2035, ridership is estimated to reach 23,000 riders.

Improved Safety, Public Health, Active Transportation - Due to the proximity of the BRT stations to neighborhood residential and enhanced pedestrian connections, walkability from nearby residential and commercial uses will be enhanced. The South Bay Rapid will signalize 20 intersections in the City of Chula Vista, upgrade pedestrian crossings at these intersections, and provide new sidewalks and pedestrian pathways to and from neighborhoods near the transit stations. The Project also will include enhanced bicycle connections along the transit bridge and connecting roadways through the Otay Ranch Town Center. The new dedicated bike lane and pedestrian walk way between the Intermodal Transportation Center and the pedestrian border crossing at Otay Mesa will provide a safe, lighted pathway that does not currently exist for border crossers. Regional transit connections at the border will improve public health by reducing the amount of time commuters have to wait in border lines. The Otay Mesa Border Crossing has a history of toxic air contamination and waiting in vehicles to cross the border has been determined to have an impact on public health. The South Bay Rapid provides a direct connection to the border and enhanced pedestrian pathways will provide an alternative to vehicle wait times.

Integration - The South Bay Rapid will integrate with various rail and transit operations by enabling transfer connections to local and express routes serving the Otay Mesa regional employment center, as well as transit services to Downtown San Diego where riders can make convenient transfer connections to Amtrak, three light rail lines, commuter rail, two other Rapid lines, and 16 local bus services. Additionally, the station in Otay Mesa will provide direct transit connections to the international border crossing and the planned Rapid line being implemented in and by the City of Tijuana. The project also will provide direct connections to the Amtrak station in Downtown San Diego, with the potential to extend service to the southern terminus station for High Speed Rail service, which is located one mile north of Downtown San Diego.

Economic - Implementation of the South Bay Rapid will enhance career and educational opportunities connecting communities throughout the region to key employment areas in Chula Vista and Otay Mesa. In addition, by providing transfer connections to other rail and BRT services in Downtown San Diego, transit riders will have access to regional job centers in Kearny Mesa, University Town Center and Sorrento Mesa, as well as San Diego State University and University of California, San Diego. This much-needed new transit service also will help to reduce transportation-related expenditures in the corridor and provides access to three elementary schools in each of the transit villages, two high schools (Lomas Verdes and Santa Venetia stations) and will connect in the future to a planned 30,000 student campus in Village 9 that will connect to the South Bay Rapid project.

Environmental - The South Bay Rapid will support the use of clean air transit and provide a new mode choice at the Otay Mesa Border crossing which has a history of toxic air pollution. The introduction of the South Bay Rapidroute will provide unprecedented opportunity for those living, working, and traveling through the eastern Chula Vista/Otay Mesa area to use transit, thereby leading to reduced congestion and improved air quality. In addition, all South Bay Rapid vehicles will utilize compressed natural gas with limited emissions.



### Table 6: Project Schedule

Capital Projects				
Begin Construction Phase (Contract Award) - multiple contracts for specific segments	1st Segment: 6/1/16			
End Construction Phase (Contract Acceptance)	1/9/2017			
Begin Vehicle/Equipment Order (Contract Award)	n/a			
End Vehicle/Equipment Order (Contract Acceptance)	n/a			
Begin Closeout Phase	1/10/2017			
End Closeout Phase	7/31/2017			

Operations Projects				
Begin expanded/enhanced transit services	N/A			
End expanded/enhanced transit services	N/A			
Begin Closeout Phase	N/A			
End Closeout Phase	N/A			

START DATE FOR LCTOP FUNDED PHASES MAY NOT PROCEED PROJECT APPROVAL LETTER.

Pre-construction costs (e.g design, environmental and right-a-way) are not eligible to be funded by LCTOP funds, they must be funded by other sources.

### Low Carbon Transit Operations Program (LCTOP) PROJECT DESCRIPTION AND ALLOCATION REQUEST (OPERATIONS DESCRIPTION)

### **Table 7: Operations Project Description**

a) Describe the operating plan for this system.

N/A

b) Describe the fare structure for this system.

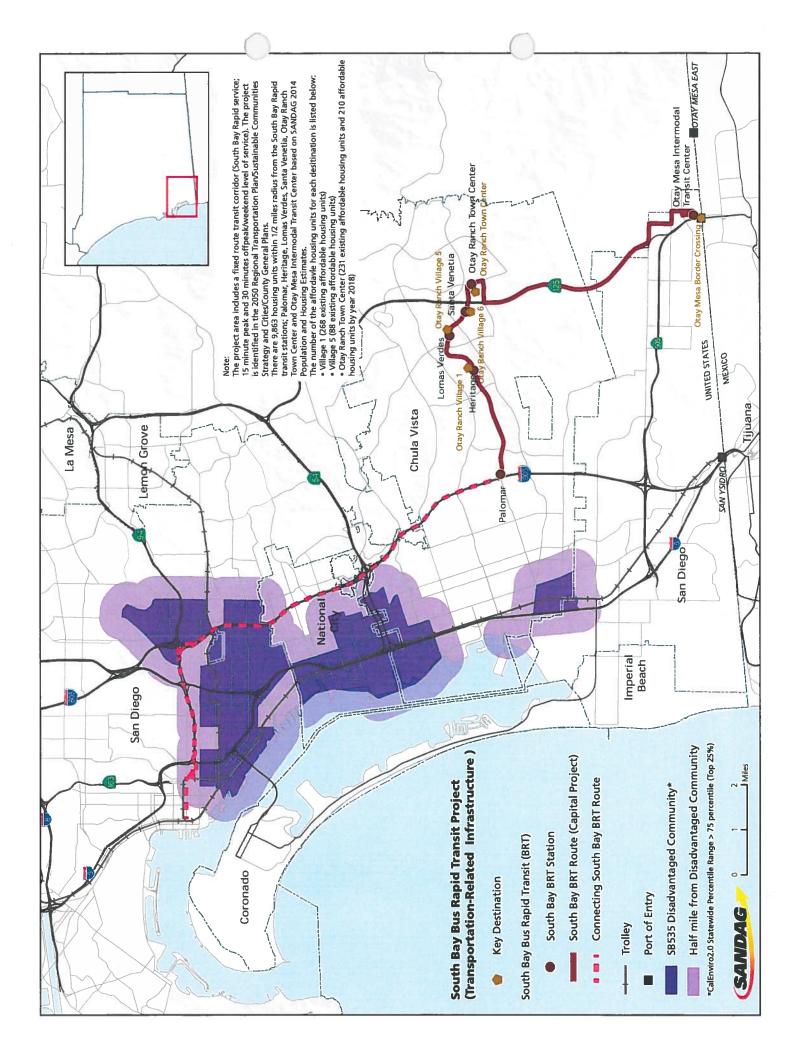
N/A

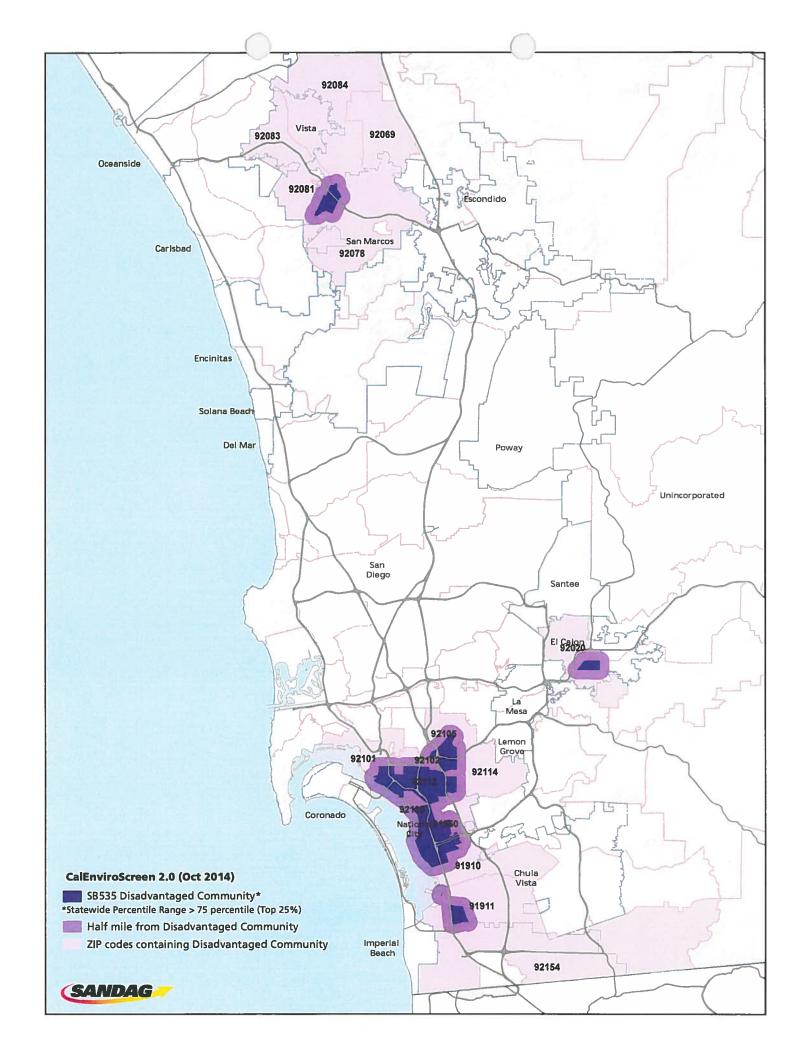
c) Describe the assumptions and process that were used to develop the ridership projections shown in the request.

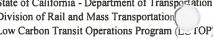
N/A

d) Describe the assumptions and process for how the operating cost projections were developed.

N/A









### **Low Carbon Transit Operations Program** TOTAL PROJECT COST AND FUNDING PLAN

The following Funding					gned. It included		e list of funds	for this project
Person preparing this f Dawn Vettese	orm (please typ	pe or print)	-		Phone: 619-595-534	6	Date: February 9, 20	016
Approval Authority: S			9		and phone nu	***		
	Sha	aded fields are a	automatically ca	ilculated. Plea	se do not fill the	ese fields.		
Proposed Total Proje	ect Cost							Project
Component	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
PA&ED	12,335,000	0	0	0	0	0	0	12,335,000
PS&E	11,423,000	0	0	0	0	0	0	11,423,000
R/W	3,778,000	0	0	0	0	0	0	3,778,000
CON	0	0	69,596,000	0	0	0	0	69,596,000
Veh/Equip Purchase	5,000	0	0	0	0	0	0	5,000
Operations/Other	0	0	0	0	0	0	0	0
TOTAL	27,541,000	0	69,596,000	0	0	0	0	97,137,000
Low Carbon Transit	Operations Pro	gram (LCTOI	P)					
Component	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
PA&ED								0
PS&E			Ī					0
R/W								0
CON	İ		375,669				· 1	375,669
Veh/Equip Purchase		i						0
Operations/Other	i i	i						0
TOTAL	0	0	375,669	0	0	0	0	375,669
Funding Source:	FTA 5309 -	Bus						
Component	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
PA&ED	1,827,000							1,827,000
PS&E								0
R/W								0
CON							<del>                                     </del>	0
Veh/Equip Purchase	<del> </del>							0
Operations/Other	1			-				0
TOTAL	1,827,000	0	0	0	0	0	0	1,827,000
TOTAL	1,027,000	U.	U	0	U	U	U	1,027,000
Funding Source:	FTA 5307							
Component	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
PA&ED	545,000	11 2013	1 1 2010	11 2017	112010	1 1 2017	112020	545,000
PS&E	343,000							0
R/W	-				-			0
CON	-				-		-	0
Veh/Equip Purchase	<del>  </del>							0
	<del>  </del>				-			0
Operations/Other	£45,000	0	0	0	0	0	0	
TOTAL	545,000	0	0	0	0	0	0	545,000
Е и с	Tues Net Te							
Funding Source:	TransNet Tr	7	EV 2016 T	EV 2017	L EV 2019	EV 2010	EV 2020	Tot-1
Component	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
PA&ED	148,000	•			-		<del>                                     </del>	148,000
PS&E	<del>                                     </del>							0
R/W	<del>                                     </del>							0
CON	<b> </b>				-			0
Veh/Equip Purchase				01/85	ļ			0
Operations/Other	412.25							0
TOTAL	148,000	0	0	0	0	0	0	148,000



### Low Carbon Transit Operations Program TOTAL PROJECT COST AND FUNDING PLAN

Funding Source:	TransNet M	С						
Component	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
PA&ED	9,815,000							9,815,00
PS&E	11,243,000		<del></del>	<del></del>				11,243,0
R/W	3,778,000			+				3,778,00
CON	3,778,000		57 226 221					
	5,000		57,236,331					57,236,3
Veh/Equip Purchase Operations/Other	5,000							5,00
TOTAL	24,841,000	0	57,236,331	0	0	0	0	82,077,33
IOIAL	24,041,000	U <sub>I</sub>	37,230,331	U	U	U	U	02,077,3.
Funding Source:	Local							
Component	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
PA&ED	FIIOI	F1 2015	1 1 2010	11 2017	11 2016	F1 2019	F I 2020	TOLAL
	100,000							100.00
PS&E	180,000							180,00
R/W			001.00					
CON			984,000					984,0
Veh/Equip Purchase								ALF VIN
Operations/Other								
TOTAL	180,000	0	984,000	0	0	0	0	1,164,0
	lave ce							
Funding Source:	TIRCP							
Component	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
PA&ED								
PS&E								
R/W							[	Deliver of
CON			4,000,000					4,000,00
Veh/Equip Purchase		Ĭ						
Operations/Other								
TOTAL	0	0	4,000,000	0	0	0	0	4,000,00
				•				
Funding Source:	AHSCP							
Component	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
PA&ED								
PS&E	1		i					
R/W				***				
CON	1		7,000,000					7,000,0
Veh/Equip Purchase	<del>                                     </del>		7,000,000					7,000,0
Operations/Other			-		-			
TOTAL	0	0	7,000,000	0	0	0	0	7,000,0
IOIAL	1 0	Ų	7,000,000	U	U	U	U	7,000,0
Funding Source:	WHO IN THE	10-10-10-1						F.
Component	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
PA&ED	11101	11 4013	11 2010	11201/	11 2010	1 1 2017	1 1 2020	TOTAL
	-							
PS&E								
R/W	-							
CON								
Veh/Equip Purchase	<b></b>							
Operations/Other								
TOTAL	0	0	0	0	0	0	0	



# California Air Resources Board (ARB) Greenhouse Gas Emission Reduction Calculator for the California Department of Transportation (Caltrans) Low Carbon Transit Operations Program (LCTOP) Greenhouse Gas Reduction Fund Fiscal Year 2015-16

\*\*Updated Emission factors on December 18, 2015.

The California Air Resources Board (ARB) is responsible for providing the quantification methodology to estimate greenhouse gas (GHG) emission reductions from projects receiving monies from the Greenhouse Gas Reduction Fund (GGRF)

This GHG emission reduction calculator accompanies the quantification methodology for the fiscal year (FY) 2015-16 GGRF Low Carbon Transit and Operations Program (LCTOP) available at: http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/finallctopgm.pdf

Applicants must use this calculator to estimate the GHG reductions associated with the LCTOP projects. Refer to the quantification methodology document for background, step by step detailed instructions and examples. To use this calculator, follow these steps:

Step 1 Identify the LCTOP proposed project type(s): The applicant must select at least one eligible project type from Tables 1 or 2 and may select additional project types from Tables 3 or 4.

Step 2 Determine the inputs needed: The applicant will use Tables 5 and 6 to determine the required project details needed for input into this calculator tool for the applicable project type selected

Step 3 Estimate GHG emission reductions: The applicant will enter the project details identified in Step 2 into this calculator tool to calculate the GHG emission reductions of the proposed project

# Read Me Tab (this page):

characters. For example, if the application ID is "1-1C\_001," the project name is " Transit BRT," and the file is the input file, the file name may be " 1-1C\_001Transit BRT." Project names may be Enter the Project Name, Project ID and the contact information for person who can answer project specific questions from staff reviewers on the quantification calculations. The Project ID is assigned by Caltrans. This file will be submitted with other documentation requirements. Please use the following file naming convention: "[Project ID] [Project Name]" not to exceed 20 abbreviated

Project Name:	South Bay Rapid
Project ID:	
Contact Name:	Jennifer Williamson
Contact Phone Number:	6261-669 (619)
Contact Email:	jennifer.williamson@sandag.org
Date Completed:	2/9/2016

## nputs lab:

These cells will turn black and be locked based on inputs. Applicants should use as many rows as necessary to characterize all relevant features of the proposed project. Definitions are provided in the definitions tab, including how to determine Year 1, Year F, and adjustment factors. Inputs must be substantiated in the documentation provided to ARB; see Section C. Documentation of the Headers in red indicate input needed by the project applicant. For each row, applicants must work from left to right and enter all relevant data. Some cells may not be applicable to the project auantification methodoloav.

Submit documentation: Save file for submittal. See Section C. Documentation of the quantification methodology for additional documentation requirements.

For more information on ARB's efforts to support implementation of GGRF investments, see: Questions on this document should be forwarded to GGRFProgram@arb.ca.gov

Questions on this document should be forwarded to GGRFProgram@arb.ca.gov Questions on the LCTOP program should be forwarded to LCTOP comments@dot.ca.gov

www.arb.ca.gov/auctionproceeds

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# California Air Resources Board (ARB) Greenhouse Gas Emission Reduction Calculator for the California Department of Transportation (Caltrans) Low Carbon Transit Operations Program (LCTOP) Greenhouse Gas Reduction Fund Fiscal Year 2015-16

California Environmental Protection Agency

South Bay Rapid Project Name: Project ID:

Inputs in RED must be filled out

Document	GHG Emissions	
cancav	(MTCO2e)	Description
Net GHG Benefits	(30,654.05)	(30,654.05) Total GHG Emission Reductions (MTCO2e)
LCTOP Funds Requested (\$)	Funds re 375,669.00 2015-16	Funds requested per State Controller's Office Eligible list for FY 2015-16
		Includes all LCTOP allocations the applicant intends to utilize (up to three FY allocations including FY 2015-16) for the
		proposed project. Use the State Controller's Office Eligible list
		for FY 2015-16 allocation funding amounts to estimate the
Total LCTOP Funds Requested (\$)	375,669.00	375,669.00 subsequent funding allocations.
وفيها الأحب بالأنفاق ليستجيدون		
		Includes the Total LCTOP fund requested and any other GGRF
Total GGRF Funds Requested (\$)	11,375,669.00	11,375,669.00 Program monies
<b>Total GHG Emission Reductions</b>		
/Total GGRF Funds Requested (\$)	(0.0027)	(0.0027) The metric to be reported in the application.



# Greenhouse Gas Emission Reduction Calculator for the California Department of Transportation (Caltrans) Low Carbon Transit Operations Program (LCTOP) California Air Resources Board (ARB) **Greenhouse Gas Reduction Fund Fiscal Year 2015-16**

South Bay Rapid **a** Air Resources Board

Project Name:

Inputs into columns highlighted in YELLOW with RED headers are required fields dependent on project type (see quantification methodology) Must be filled out from left to right Project ID:

Pro	Project Details				
. Eligible Project Type	Transit Service Type	County	Year 1 (Yr1)	Year F (YrF)	Yr1 /
New/Expanded Service	Bus (long distance commuter) San Diego	San Diego	2017	2037	18,736

Fuel Type				である。 では、 は、 は、 は、 は、 は、 は、 は、 に、 に、 に、 に、 に、 に、 に、 に、 に、 に			
Annual Average VMT Displaced	127,598.25		•				•
Length (LL)	2.00				200		
justment Length Adjustment Length (A) (L) (AA) (LL)	0.10						
Length (L)	12.16						
justment (A)	0.50						

Engine MY 2017

Adjustment Length
(A) (L)

YrF Annual Ridership 23,939

**Displaced Autos Details** 

New/Expanded Vehicle Details

Net GHG Benefits	Total GHG Emission Reductions (MTCO2e)	-30654.05
	Annual VMI or Units of Fuel	
	Engine MY	
Old Service Vehicle or Displaced Fuel Details	Fuel Type	
PIO	Additional Project Type	
	Useful Life	20
	Annual VMT or Units of Fuel	721,413